



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,466	03/24/2004	Charles W. Roth	3495.0294-01	2919
22852	7590	10/19/2005	EXAMINER	
			HAMA, JOANNE	
			ART UNIT	PAPER NUMBER
			1632	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/807,466	ROTH ET AL.
	Examiner	Art Unit
	Joanne Hama, Ph.D.	1632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 24 March 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) _____ is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) 1-8 are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

This Application, filed March 24, 2004, is a CIP of 10/667,891, filed September 23, 2003, and claims priority to U.S. Provisional Application, 60/413,469, filed September 26, 2002.

Claims 1-8 are pending.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-8, drawn to a purified polynucleotide comprising a purified nucleotide sequence selected from the group consisting of SEQ ID NO. 1, an expression vector comprising SEQ ID NO. 1, a host cell comprising the vector, a method for making the transformed cell capable of expressing SEQ ID NO. 1, a method for expressing SEQ ID NO. 1 in a host cell, classified in class 536, subclass 23.1.
- II. Claims 1-8, drawn to a purified polynucleotide comprising a purified nucleotide sequence selected from the group consisting of SEQ ID NO. 2, an expression vector comprising SEQ ID NO. 2, a host cell comprising the vector, a method for making the transformed cell capable of expressing SEQ ID NO. 2, a method for expressing SEQ ID NO. 2 in a host cell, classified in class 536, subclass 23.1.
- III. Claims 1-8, drawn to a purified polynucleotide comprising a purified nucleotide sequence selected from the group consisting of SEQ ID NO. 3, an expression vector comprising SEQ ID NO. 3, a host cell comprising the vector, a method for making the transformed cell capable of expressing

SEQ ID NO. 3, a method for expressing SEQ ID NO. 3 in a host cell, classified in class 536, subclass 23.1.

IV. Claims 1-8, drawn to a purified polynucleotide comprising a purified nucleotide sequence selected from the group consisting of SEQ ID NO. 4, an expression vector comprising SEQ ID NO. 4, a host cell comprising the vector, a method for making the transformed cell capable of expressing SEQ ID NO. 4, a method for expressing SEQ ID NO. 4 in a host cell, classified in class 536, subclass 23.1.

V. Claims 1-8, drawn to a purified polynucleotide comprising a purified nucleotide sequence selected from the group consisting of SEQ ID NO. 5, an expression vector comprising SEQ ID NO. 5, a host cell comprising the vector, a method for making the transformed cell capable of expressing SEQ ID NO. 5, a method for expressing SEQ ID NO. 5 in a host cell, classified in class 536, subclass 23.1.

VI. Claim 8, drawn to nucleic acids encoding multiple drug resistance proteins from *Drosophila melanogaster* or *Anopheles gambiae* other than those of SEQ ID NO. 1-5, classified in class 536, subclass 23.1.

The inventions are distinct, each from the other because of the following reasons:

Inventions I-VI are patentably distinct. Inventions I-VI are drawn to different nucleic acids which encode different proteins, each of which has a unique biological function. The search for Inventions I-VI is burdensome because the search for one

nucleic acid sequence is not coextensive with the search of other nucleic acid sequences.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter and that the search for one Invention is not required for the search of another, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joanne Hama, Ph.D. whose telephone number is 571-272-2911. The examiner can normally be reached Monday through Thursday and alternate Fridays from 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla, Ph.D. can be reached on 571-272-0735. The fax phone

Art Unit: 1632

number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public. For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

JH

ANNE M. WEHBE, PH.D.
PRIMARY EXAMINER

